

**Written Remarks of Matthew Dowling,  
PhD, CEO & Co Founder, Remedium Technologies**

**“Make It in America: What’s Next?” District Field Hearing  
PANEL THREE: Next Generation Maryland Products**

Consider an injury resulting from a traumatic automobile accident, or a deep laceration from a harrowing industrial mishap, or a seriously wounded soldier on the field of battle. First Responders are faced with the immediate challenge of managing uncontrolled hemorrhage or consequently dealing with a cascade of life threatening complications that would quickly follow including: shock, organ failure, impaired resuscitation, infection, and coagulopathy – a condition that makes the stoppage of blood flow nearly hopeless. Although medical attention is immediately provided, statistics show that such trauma is the leading cause of death among patients aged 1 to 44, with hemorrhage being responsible for 40% to 50% of deaths following traumatic injury.

Non-compressible hemorrhage, bleeding that is not accessible to direct pressure, is particularly problematic and often associated with injuries to soft tissues within the abdomen or other intracavitary sites. 90% of deaths due to severe bleeding result from non-compressible hemorrhage and this accounted for more than 50% of lost lives to the US Military in Iraq and Afghanistan. While several advanced hemostatic technologies have been developed to stop bleeding and offer improved patient outcomes over standard field-dressings, none of them are suited to treat non-compressible hemorrhage.

In the next several years, **Remedium Technologies, Inc. (RTI)**, a Maryland born-and-bred medical device startup, will market proprietary hemostatic and tissue sealant products to address the unmet needs of first responders, surgeons, other medical practitioners, and consumers including but not limited to non-compressible hemorrhage. These products will leverage RTI’s award-winning biopolymer-based technology to provide superior hemorrhage control and other wound care properties for moderate and severe bleeding applications. The technology platform, Hemogrip™, is based upon chitosan, a naturally occurring, widely available biopolymer extracted from the shells of crab, shrimp, insects and mushroom. Chitosan-based wound dressings have been shown to prevent infection and accelerate wound healing.

This year, RTI received FDA 510(K) clearance for its lead product, and the company is in the process of finalizing distribution licenses for the eagerly anticipated US market launch. RTI will commercialize a pipeline of patented hemostatic products including compression bandages, clear films, gauze, sprayable foam, and surgical gel. The Hemogrip™ platform allows for a vast array of product form factors, giving the company a unique competitive advantage and strong basis for growth.

Within 10 years, the company aims to become a major manufacturer and marketer of advanced wound care products, and, as such, a major employer of skilled Maryland-area workers. Already, several full-time and part-time positions have been created due to the company’s early-stage growth. RTI’s story and mission falls directly in line with the spirit of Make It In America. Therefore, we are honored to give testimony at today’s hearing.